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THE FUTURE OF STRATEGIC NUCLEAR DETERRENCE

BY

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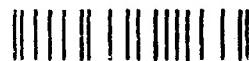
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THE FUTURE OF STRATEGIC NUCLEAR DETERRENCE

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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The evolving role of our Strategic Nuclear Forces and the deterrent requirement of that force in a changing and volatile world are two of the most contentious issues facing this country's leadership. The debate surrounding these forces has been brought about by many diverse factors that include the dissolution of the Soviet Union and the resultant end of the Cold War, bilateral arms control agreements and unilateral reductions which have reduced the number and operational status of nuclear forces, and a perceived reduction in the threat facing the U.S. and its allies. Additionally, the success of U.S. technology as seen in the effects of modern conventional munitions in the Gulf War and the proliferation of ballistic missile and nuclear weapons technology into Third World countries have further compounded the complexity of the issue. The concomitant changes in the focus and structure of U.S. and allied military forces have further fueled the debate. As the National Security Strategy and supporting National Military Strategy are evolving to meet new threats, it is essential to provide an analysis of the continued deterrent role of our Strategic Nuclear Force in this changing world. This study provides an analysis of our evolving Nuclear Strategy and force deterrent requirements in relationship to these significant changes.

INTRODUCTION

One of the most contentious issues facing our country's leadership is the evolving role of our Strategic Nuclear Forces and their contribution to the national security of our nation in these most turbulent of times. The debate surrounding these forces centers upon their role, their numbers, and their ultimate value in a new world order that now seems devoid of a major threat to our sovereignty. This debate permeates all levels of society and government and has become the focus of the press, special interest groups, and pseudo-military strategists who hail the near arrival of a nuclear free world and the oft cited 'peace dividend' that will resolve the domestic problems of our society.

The debate as to the role of our nuclear forces has been fueled by several diverse factors that include the dissolution of the Soviet Union and the resultant end of the Cold War, bilateral arms control agreements and unilateral reductions which have reduced the number and operational status of nuclear forces, a perceived reduction in the threat facing the U.S. and its allies, the success of U.S. technology as seen in the effects of modern Precision Guided Munitions in the Gulf War, and the proliferation of ballistic missile and nuclear weapons technology into Third World countries. These factors coupled with a radical shift in the focus and structure of U.S. military forces have resulted in public and governmental debate pertaining to the role of our nuclear forces as well as the requirement for their ultimate retention in any significant or viable number.

To consider the continued requirement for the deterrent

capability provided by our Strategic Nuclear Forces, the basic concept of nuclear deterrence, the current and emerging nuclear strategy of the U.S. and its allies, and the role that our nuclear forces play in that strategy must be considered. Ultimately, those formulating our future national strategy must clearly weigh the ramifications of emerging world trends and potential threats against the deterrent requirement and national security implications of the loss of the nuclear capability before postulating a position on the role and retention of our Strategic Nuclear Forces. This task becomes even more complex given the difficulty in identifying potential threats to our national security interests and the fleeting nature of those threats in a volatile and changing world environment. The task is compounded even further given the purported end of the historical threat posed by the Soviet Union and its Cold War allies as well as the lack of readily discernable and viable regional threats that are accepted by our Congress and public. At this juncture of our nuclear strategy reformulation, it is essential to provide an analysis of the continued deterrent role of our Strategic Nuclear Forces in light of the unparalleled changes in the world in the last two years and the postulated threats that our military planners will face in the coming decade.

BACKGROUND

Any analysis of the continued role of our Strategic Nuclear Forces must begin with a firm understanding of the basic concept of nuclear deterrence, current and emerging U.S. Nuclear

Deterrence Strategy, and the effects of the pivotal factor which has resulted in the requirement for the reformulation of that strategy - the dissolution of the Soviet Union. Deterrence has any number of definitions, but, simply put, it means the prevention from action by the fear of the consequences.

Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction.¹ Deterrence is an integral part of military strategy and planning and comprises one of the two traditional categories of use for military force.

The possession of military power poses a threat to one's adversaries and is maintained to dissuade others from using military power. Presumably this is accomplished through the use of threat. One kind of threat, the denial threat, is the promise to defeat any military action taken against you. A second form of threat is the promise of retribution that would cause an aggressor at least as much if not more punishment than his attack might cause. This is known as the punishment threat.²

Logically, deterrence can be seen as the paramount concept of nuclear strategy.

U.S. Nuclear Deterrence Policy has evolved consistently over the last forty years based primarily upon the perceived threats, both conventional and nuclear, facing our nation and allies and the force required to counterbalance that threat. In fact, the U.S. has long relied on the power and deterrent credibility of its nuclear arsenal to permit an expansion of strategic commitments beyond U.S. military capabilities.³ U.S. Nuclear Deterrence Policy for several decades has been based on deterring

attacks - particularly nuclear attack - against U.S. territory, deployed U.S. forces, or U.S. allies. Three fundamental objectives will continue to underpin U.S. Strategic Nuclear Policy in the future:

- Maintaining effective deterrence so that a potential aggressor would conclude that the cost of an attack against the U.S. or its allies would far exceed any expected gain;
- Fostering nuclear stability, a condition whereby no nation is pressured to use nuclear weapons preemptively; and
- Maintaining the capability, if deterrence fails, to respond flexibly and effectively to an aggressor's attack.⁴

These three objectives provide the focus and basic understanding of the current as well as future deterrent requirements for our nuclear forces. They call for maintaining the capability to respond appropriately and effectively to any level of aggression. Options that offer a range of choices with respect to both the timing and scale of nuclear weapons employment must be available. A range of response options provides the hope of reestablishing deterrence at the lowest level of violence.⁵ In short, this represents a continuing requirement for a diverse and flexible spectrum of retaliatory options in support of a flexible response strategy. The debatable point that arises from these fundamental objectives and policy is whether they are still applicable given the dissolution of the Soviet Union and its perceived threat to Western Europe and the U.S. per se.

DISSOLUTION OF THE SOVIET UNION

In the early Fall of 1991, the U.S. found itself alone in

the world as the only remaining superpower of the Cold War Era. Since the extraordinary revolutions of 1989 in Eastern Europe and the total disintegration of the former Soviet Union in August 1991, the future National Security Strategy of the U.S. and its associated military strategy have been under constant debate. In both scope and importance, this is the first major debate on U.S. strategy since the policy of containment was adopted in the 1950's. The containment policy was fortified with the strategic doctrines of coalition warfare supported by forward-deployed U.S. forces and an overarching and extended nuclear deterrent. This time, however, the debate is unfettered by the competitions of a bi-polar world and the complexities that world entailed for U.S. security policy and military strategy.* The end of the Cold War proved to be a seminal event in the nuclear age of the U.S. in both national policy and force structure. The debate over the roles and structure of our nuclear forces surfaced in the Congress in the Spring of 1990 and centered on the Fiscal Year 1991 budget. As the fiscal arguments were developed, attention was expanded to include military strategy and the deterrent roles required to support the projected modernization programs of our Strategic Nuclear Forces.

The relevance of nuclear deterrence to U.S. interests was not generally questioned from the late 1940's until the present time. Given the military capabilities of the Soviet Union and its intention to dominate Europe, the weak position of our own West European allies in the aftermath of World War II, and the limits Congress would place on the number of U.S. troops in that

region, deterrence of Soviet aggression by the threat of nuclear retaliation seemed the best solution to our European security problem. In combination with a diplomatic strategy of collective security and an economic strategy of European reconstruction, the defense strategy of deterrence supported the grand strategy of containing the burgeoning Soviet land and eventually missile threat to Western Europe.⁷ With the end of the Cold War and the massive threat associated with it, it is readily apparent that the U.S. needs a new National Security Strategy. The environment facing our leaders has changed to a regional orientation marked by less rigid warning assumptions. This in turn requires flexible and adaptive plans based on strategic agility and the new concept of overwhelming force that emerged from the Gulf War. Certainly, planning must become more flexible and adaptive to meet the uncertainty of this regional orientation.

EMERGING NATIONAL SECURITY STRATEGY

A new National Security Strategy intended to meet these challenges was published in August of 1991. An integral part of that strategy is our Strategic Nuclear Forces and their deterrent role in a changing yet still volatile world. The four fundamental demands of that strategy are to ensure strategic deterrence, to exercise forward presence in key areas, to respond effectively to crises, and to retain the national capacity to reconstitute forces should the need arise. Even in a new era, deterring nuclear attack remains the number one defense priority of the U.S.* This transition in our National Security Policy and supporting strategies can be best explained in a Cold War and

post-Cold War context. During the Cold War, our National Security Policy was one of containment, while the post-Cold War has seen the emergence of the policy of peacetime engagement. The National Security Strategy of the Cold War was one of flexible response and deterrence; the post-Cold War National Security Strategy can be seen as one of discriminant response and collective action based upon deterrence and influence. The Cold War National Military Strategy was one of forward defense and rapid reinforcement focused on global war, whereas the post-Cold War strategy is one of forward presence and crisis response focused on regional contingencies.

The concept of deterrence is the one constant throughout these policies and strategies. This underlying theme of the constant requirement for deterrence can best be examined in the context of NATO, the cornerstone of the historical reliance on the deterrent role of nuclear weapons in general and U.S. nuclear forces in particular.

NATO

NATO was the first peacetime military alliance in the history of the U.S. It responded to the need for a united, powerful, military front in the face of an expansionist Soviet Union in Eastern and Southern Europe. In 1949 the original signatories pledged to engage in mutual self-defense. The alliance provided the precedent for other U.S. multilateral and bilateral defense arrangements. These actions formed the outline of an American foreign policy based upon the concept of containment of the spread of Soviet influence and communism.⁹ At

various times since the advent of NATO, the grand strategy of containment encompassed all instruments of American national power. This strategy incorporated subsidiary diplomatic, economic and defense strategies directed not only at the Soviet Union and its satellites, but also the supposed victims of Soviet expansionism, particularly Western Europe. Over time, economic and diplomatic strategies supporting containment faded in importance. The concept of a conventional force sufficient to contain the Red Army and its allies also became less than viable as the Soviet Union began unprecedented technological and numerical upgrades in its forces. In response, the defense strategy of NATO and the U.S. became centered upon nuclear deterrence. For the last forty years, U.S. defense policy has focused on the maintenance of a credible nuclear deterrent. Washington sought to implant and nourish the impression that the U.S. would use nuclear weapons to prevent a Soviet military occupation of Western Europe.¹⁰

During the last decade, the prevalent NATO nuclear strategy existed in Military Committee Document 14/3, popularly known as the Flexible Response Strategy. This document allowed for a spectrum of allied responses to Soviet and Warsaw Pact attack and, as a major point, did not renounce the right to first use of nuclear weapons in defense. The deterrent effects of the Flexible Response Strategy rests on three pillars:

- The political determination of all Alliance members to resist jointly any form of aggression or blackmail;
- The capability of the Alliance to react effectively at every

- level of aggression; and
- The flexibility to choose between different possible reactions either conventional or nuclear.¹¹

This strategy was certainly a point of contention politically and domestically within the Alliance but withstood many landmark challenges. These challenges included the NATO Dual-Track Decision which allowed the deployment of the PERSHING II and Ground-Launched Cruise Missiles in response to the Soviet Union's unprecedented modernization of its theater nuclear weapons beginning in the mid-1970's. Ultimately, the NATO strategy withstood the most difficult test - the test of time. With the profound changes in Europe and the Soviet Union in the last two years, it was necessary for NATO to adapt its Defense Strategy once again. The changing security environment and reduced threat posed by the collapse of the Warsaw Pact and the Soviet Union made this reformulation of Alliance strategy imperative.

Within NATO the transformation began in earnest with the July 1990 London Declaration in which the NATO Heads of State and Government set a new course for the Alliance. The decision was made to transform the Alliance into an organization more focused on the political dimension of defense and security rather than one whose primary focus was military. Determined to give NATO a new face, members sought to reexamine the raison d'etre of the Alliance, provide new political guidance for the development of a new military strategy, and then develop a force structure which was capable of preserving and protecting the peace.¹² Relevant decisions relating to nuclear deterrence that were decided at the

London meeting include the decision that the role of ground based sub-strategic systems (artillery-fired atomic projectiles and short-range ballistic missiles (LANCE)) would be significantly reduced based upon emerging political and military changes. Accordingly, an agreement was announced that called for the elimination of all nuclear artillery shells from Europe in return for reciprocal action on the part of the Soviet Union once arms control talks on sub-strategic systems were initiated.¹³ Based upon this agreement, the U.S. response was to forego modernization plans for the LANCE and artillery-fired atomic projectiles.

The NATO Defense Planning Committee and the Nuclear Planning Group met in Brussels on 28 and 29 May 1991 and proposed the concepts that would form the Alliance's New Strategic Concept. The Alliance's New Strategic Concept was formally announced on 7 November 1991, following a meeting of the Heads of State and Government in Rome. The major points of the New Strategic Concept pertaining to nuclear forces included the following:

- The fundamental purpose of the nuclear forces of the Alliance is political: to preserve peace and prevent coercion and any kind of war. They will continue to fulfil an essential role by ensuring uncertainty in the mind of any aggressor about the nature of the Allies' response to military aggression.
- The supreme guarantee of the security of the Allies is provided by the Strategic Nuclear Forces of the Alliance, particularly those of the U.S.; the independent nuclear forces of the United Kingdom and France, which have a

deterrant role of their own, contribute to the overall deterrence and security of the Allies.

- A credible Alliance nuclear posture and the demonstration of Alliance solidarity and common commitment to war prevention continue to require widespread participation by European Allies involved in collective defense planning in nuclear roles, in peacetime basing of nuclear forces on their territory, and in command, control and consultation arrangements. Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and North American members of the Alliance. The Alliance will therefore maintain adequate nuclear forces in Europe.
- The Alliance will maintain adequate sub-strategic forces based in Europe which will provide an essential link with strategic nuclear forces, reinforcing the trans-Atlantic link.

Additionally, the New Strategic Concept called for the continued pursuance of further progress in arms control and confidence building measures with the objective of enhancing security and stability.¹⁴

Several points become clear when analyzing the Alliance's New Strategic Concept in the context of the continuing deterrent role of nuclear weapons:

- Nuclear weapons will continue to play a dominant role in NATO's strategic planning.
- The supreme guarantee of the Alliance's security is the

strategic nuclear forces of the Alliance, in particular, those of the U.S.

- Nuclear forces will remain in Europe and widespread European Allied participation in nuclear roles will continue.
- Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and North American members of the Alliance.

In short, nuclear weapons remain a cornerstone of NATO's defense and constitute the major element of deterrence in the NATO context. Concurrently, NATO will seek to establish reduced force levels, to include nuclear forces, based upon the radical changes in the security situation in Europe and ongoing arms control initiatives.

ARMS CONTROL

Following the decline of the Soviet Union and the resultant trends in NATO, perhaps no factor is more contentious to the theories of strategic defense and deterrence than that of arms control. The INF and START agreements and the U.S. Unilateral Reductions of September 1991 contributed to a reemergence of the issues of the roles of our Strategic Nuclear Forces, further reductions in our nuclear forces either through unilateral reductions or agreements, force modernization, perceived threats, and in particular, the validity of our nuclear strategy. What must be understood is that arms control is only one component of a balanced national strategy. Indeed, arms control and strategic deterrence are both pillars of our New Defense Strategy and are inherently related and mutually supporting. The U.S. National

Security Strategy sets the arms control goal of attaining agreements that will enhance the security of the U.S. and its allies while strengthening international security through the following:

- Reducing military capabilities that could provide incentives to initiate attack;
- Enhancing predictability in the size and structure of forces in order to reduce the fear of aggressive intent; and
- Ensuring confidence in compliance through effective verification.

The relationship between arms control and strategic deterrence is evident in the basic interests and objectives of our National Security Strategy. These include the thought that the U.S. seeks, whenever possible in concert with its allies, to improve stability by pursuing equitable and verifiable arms control agreements while concurrently modernizing our strategic deterrent.¹⁸ What becomes clear from these strategic objectives is that the principles of stability, predictability, and verification are paramount and are inherently related to maintaining an effective deterrent. Arms control agreements are thus a part of a larger national strategy that is constantly evolving based upon the threat.

The INF agreement with the Soviet Union in late 1987 served the distinct purpose of eliminating an entire class of missiles with ranges between 500 and 5500 kilometers. This agreement, when analyzed, seems to meet the criteria of our National Security Strategy for arms control. It enhances the security of

the U.S. and its allies, in this case NATO, by reducing the Soviet theater missile threat to our deployed forces and Western Europe as well as the Far East. It reduces military capabilities that could have provided the incentive to attack, in this case Soviet SS-20's and SS-23's targeted against NATO and the Korean peninsula. It enhances the predictability of the size and structure of nuclear forces and ensured compliance through the most stringent verification regime in the history of arms control. This agreement was driven by the NATO decision in 1983 to deploy modernized longer-range INF systems in response to the Soviet deployments which began in the late 1970's. This Soviet force threatened the stability of Western Europe and was unprecedented in both number and scope. The NATO strategy to offset this situation was entitled the Dual-Track Decision. It sought to deploy modernized longer-range INF systems while concurrently seeking an arms control agreement with the Soviet Union to reduce the numbers of deployed missiles on both sides. Eventually, negotiations led to agreement and the complete elimination of all longer-range INF systems.

The START agreement, which has not yet been ratified by the U.S. Senate, is altogether more complex than that of INF. It calls for limits on strategic nuclear forces but allows for residual forces composed of land, air, and sea components. This residual force, coupled with the issues of counting rules, multiple independent reentry vehicles, and mobile ICBM's add to the complexity of START. The treaty limitations agreed to in START are as follows:

<u>Agreed Numbers</u>	<u>Description</u>
1600	Deployed Strategic Nuclear Delivery Vehicles
6000	Accountable warheads

Sublimits

4900	Warheads on ballistic missiles
incl. 1540	Warheads on Soviet Heavy ICBMs
1100	Warheads on Mobile ICBMs

Other agreements

- U.S. heavy bombers may carry no more than 20 long-range air-launched cruise missiles (ALCM) each, and 150 of these bombers will count as carrying only 10 each.
- Soviet heavy bombers may carry no more than 12 ALCMs each, and 210 of these bombers will count as carrying only eight each.
- All heavy bombers equipped with bombs and short-range attack missiles (SRAMs) will count as carrying one warhead each.
- Reductions will take place over seven years.
- The treaty will be in force for fifteen years with an option to extend.
- Separate politically binding agreements will limit sea-launched cruise missiles with ranges above 600 kilometers to 880 for each side and Soviet Backfire bombers to 500.¹⁶

The complexity of the START agreement has created questions on numerous key points to include supposed advantages realized by the Soviets and the need for further, deeper cuts. What must not be lost in these peripheral debates, however, is the point that

the agreement meets the arms control objectives of our National Security Strategy. It reduces the military capabilities that could provide incentives to attack, enhances predictability in the size and structure of forces, and ensures compliance through its stringent verification regime. What is key, however, is its implications on further negotiations and initiatives as the former states of the Soviet Union transition into the Commonwealth of Independent States (CIS).

The Presidential announcement in September 1991 of unilateral U.S. reductions in short-range nuclear forces had a profound impact on the issues of nuclear deterrence and strategy. It resulted in many questioning the validity of our current nuclear strategy and the requirement for retention of any short-range nuclear forces. This U.S. initiative must be considered in the context of the changing world situation and the changing strategies of the U.S. and its allies. The threat of a preemptive and short or no-notice Soviet led invasion of Western Europe is no longer viable. The major concern of the U.S. and its allies regarding the Soviet threat is one of the control and disposition of their vast nuclear arsenal as the country splinters. The U.S. initiative is most certainly designed to hasten the elimination of this stockpile with the emphasis on those weapons of most concern, the short-range weapons spread throughout the breakaway republics. The President's decision allows for rapid movement in an area that has historically resulted in long, technically difficult, and contentious negotiations. The limiting of those weapons that were not

captured in the INF and START agreements is a logical progression in the arms control process. The pressures in Congress and NATO to enter into short-range nuclear weapons negotiations and against modernization of land-based short-range systems could lead to no other logical decision. The President's initiative included unilateral reductions, proposals for bilateral negotiations with the Soviets, and confidence building measures designed to lessen the tensions between the sides. The initiatives include the following:

- Unilateral Initiatives

- Withdraw from NATO and destroy all ground-launched short-range nuclear forces.
- Withdraw and destroy or store all sea-based short-range forces, sea-launched cruise missiles, gravity bombs from surface ships and submarines.
- Terminate MX and Midgetman Mobile ICBM programs.
- Terminate the Short-Range Attack Missile (SRAM-II) program and its tactical version (TASM or SRAM-T).

- Bilateral Negotiations

- Eliminate or modify multiple-warhead ICBMs; single warheads only for land-based missiles.
- Permit deployment of strategic, non-nuclear defense against limited ballistic missile attack.
- Cooperate to curb nuclear and ballistic missile proliferation.
- Technological cooperation to safeguard the transportation, storage, and destruction of nuclear

weapons; maintain physical security and safety of deployed nuclear weapons; and improve command and control to protect against accidental or unauthorized use.

- Confidence Building Measures

- Remove strategic bombers from day-to-day alert and store their weapons.
- Stand-down of all 450 Minuteman II ICBMs to be destroyed under the terms of START.
- Streamline U.S. command and control by consolidating operational command of Strategic Nuclear Forces under a single command.
- Take initiatives in the area of ballistic missile early warning.¹⁷

These unilateral initiatives led to the questioning of the continued requirement for the deterrent role of nuclear weapons in NATO. The President was very clear on this point, 'We will, of course, insure that we preserve an effective air-delivered nuclear capability in Europe. That's essential to NATO's security.'¹⁸ This Presidential statement is in concert with NATO's New Strategic Concept and validates the on-going requirement for the deterrent role of our Strategic Nuclear Forces as well as our forward deployed short-range nuclear forces. Furthermore, the Presidential initiatives can be seen as important steps toward aligning U.S. force structure with changing threats and reduced resources. Declaratory arms control, if reciprocated, can shortcut the tedious, overly complex and protracted process of formal negotiations.

Cooperative steps between the nuclear superpowers can reduce both bilateral threats and the threats posed by nuclear proliferation. The former Soviet Union, more than at any other time in history, is ready for dramatic shifts in its defense posture. As the USSR fragments, the President's words seem prudent -- "The Soviet nuclear stockpile now seems less an instrument of national security, and more of a burden." Dramatic and rapid reduction of this stockpile serves the interests of both Moscow and Washington.^{1*}

The Soviet responses to the Presidential initiatives have been positive and seem to meet the earlier stated arms control objectives of our National Security Strategy. These responses to the President's initiatives include reactions to each initiative, new proposals and unilateral initiatives of their own. Soviet responses include the following points:

- To destroy all nuclear artillery ammunition, warheads for tactical missiles, remove nuclear warheads for antiaircraft missiles and destroy some, and to eliminate all nuclear mines.
- Nuclear weapons on surface ships and multipurpose submarines removed, as well as from ground-based naval aviation; weapons will be stored; 'some destroyed.'
- Heavy bombers will not be on operational duty; weapons will be stored.
- Cease development of short-range missile for heavy bombers.
- Cease development of new small, mobile ICBM and freeze rail-mobile ICBM at current levels, with no modernization and

restriction to permanent bases rather than dispersed.

- Stand-down 503 ICBMs, of which 134 have multiple warheads.
- Remove from operations three SSBNs with 44 launchers and retire three more SSBNs with 48 launchers.
- Call for START II with 50 percent cuts.
- Will consider U.S. proposals on non-nuclear antimissile defense.
- Consider joint systems for early warning of missile attack.
- Ready to join U.S. in wide array of safety, transport, and storage issues.
- All strategic nuclear weapons under one operational command.

Soviet new proposals include the following:

- Eliminate (remove from the Navy and destroy) all naval tactical nuclear weapons.
- Remove nuclear weapons from tactical aviation and store them.
- Initiate START II negotiations for additional 50 percent cuts in strategic weapons.
- Cease production of all fissionable materials used in nuclear weapons.
- Join all nuclear powers in a no first use pledge.

The unilateral initiatives proposed by the Soviets include a pledge to exceed START required cuts by 1000 warheads (to 5000 warheads) and to enter into a one year moratorium on nuclear testing and invite all other nuclear powers to agree to a permanent test ban.²⁰

The reductions in nuclear weapons realized through bilateral arms control agreements with the Soviets are significant. The

additional reductions that may result from ongoing initiatives on both sides are also significant. What must be clearly understood is that U.S. National Security Strategy goals are being realized but that a clear and distinct requirement for the deterrent role of our Strategic Nuclear forces does, and will continue to, exist. This fact is reflected in our National Security Strategy. The New Strategic Concept of NATO, and in our emerging defense strategy.

What becomes clear from the U.S. initiatives in arms control is that the U.S. is moving toward a new dimension in nuclear strategy and deterrence based upon the rapidly changing conditions in Europe and other regions of the world. This thought is best expounded by General Powell who hailed the thought of beginning to step down the nuclear ladder - but not off of it. The evolving definition of nuclear soundness is to ensure American security without taking unreasonable risks, making changes that catch up to events and hold public opinion, and to build a framework for further steps.²¹ This leads some, given the initiatives of both the U.S. and Soviets and other emerging events in the world, to the ultimate question of whether the U.S. will continue down the nuclear ladder as the deterrent role for our Strategic Nuclear Forces becomes less clear. "There is an answer available. It is that while we are still getting accustomed to the new scheme of things, it is prudent and relatively painless to keep some nuclear weapons on hand and to make sure that they are regarded as an acceptable and legitimate means of defense. Especially is this so for a country like ours

which undertakes to protect friends around the world. Bush's tactical retreat - taking a disarmament initiative in order to retain useable nuclear options - fits this strategy.²²

THE THREAT

Perhaps the key question related to the issue of the future deterrent role of our Strategic Nuclear Forces concerns the deterrent requirements of the force. The answer to this argumentative question is complex, controversial, and continuously evolving in a volatile environment that has only the most cursory of control mechanisms in place. For the past 40 years, the U.S. had only the Soviet Union to deter, but the world became much more complex in the last two years. Any discussion of this question begins with the residual threat posed by the former Soviet Union and includes ballistic missile and nuclear weapons proliferation, non-nuclear weapons of mass destruction, and potential regional confrontations that could include nuclear weapons. Additionally, the verification problems associated with covert production and storage of limited or banned weapons must also be considered.

RESIDUAL SOVIET NUCLEAR WEAPONS

Until the ultimate control and disposition of the Soviet nuclear weapons are realized, they will continue to pose the greatest nuclear threat to U.S. National Security interests. This threat is manifested in a wide spectrum of potential scenarios that requires a deterrent capable of meeting various unforeseen circumstances. Various unclassified estimates of the Soviet nuclear stockpile range from 25,000 to 32,000 weapons.

Each is earmarked for one of four areas: strategic offensive forces, strategic defensive forces, land-based non-strategic forces, or non-strategic naval forces. The strategic offensive weapons are mostly concentrated in the Russian Republic, although some are based in the Belorussian, Ukrainian, and Kazakh republics as well. The strategic defensive weapons ring the periphery of the former Soviet Union and are located in many of the republics. Perhaps in more danger of theft and seizure, and easier to use, are Soviet theater nuclear weapons which are scattered in bases and storage facilities throughout the former union. The theater nuclear weapons at sea are deployed in ships that dock at Soviet ports located in five separate republics.²³ The disposition of this vast arsenal poses a serious and legitimate threat that cannot be overlooked due to continued instability and uncertainty in the CIS.

Instability in the CIS suggests three scenarios that threaten the U.S. directly or indirectly.

- First, the acquisition of nuclear weapons by one or more breakaway Republics.
- Second, conflict within the political and military leadership that results in international blackmail to gain internal advantage.
- Third, social chaos and disorder, including out-and-out civil war within or between republics that puts nuclear weapons in the hands of the warring factions, disparate ethnic minorities, or terrorists.²⁴

These scenarios provide realistic and serious threats that

remain as yet undefined, and their outcome undeterminable. If a large republic such as the Ukraine or Belorussia retains and controls the nuclear forces now on its territory, it makes either of them the nuclear equal of France or the United Kingdom. Many of these republics have quarrels with their neighboring republics and states. For example, the Armenian and Azerbaijan republics have a running quarrel over who should control the Armenian enclave of Nagorno-Karabakh in the Azerbaijan Republic. A bloody conflict has already taken place there, quelled only by the Red Army sent by Moscow. This situation could lead to a 'use or lose' confrontation where Russian troops in support of central authorities could use nuclear weapons, even without permission, to avoid being overrun and killed by superior numbers of opposing local forces. On the other hand, the various militias of the republics that have control of nuclear weapons may have the same option. This option could trigger defensive use of nuclear weapons by the Soviet Army, Air Force, or Navy especially if such units had the necessary firing codes, felt that their own survival was at stake, or were about to lose those weapons to the opposing force if the weapons were not used.²⁸

Another major concern is that local nationalist or terrorist forces might seize Russian nuclear weapons during a civil war and transfer them to another country or even to terrorist groups. For example, Muslim radicals in any one of the five Central Asian Republics might one day seize nuclear weapons and transfer them to a neighboring Muslim state such as Iran or Iraq.²⁹ Added to this concern is the possibility of the transfer of sensitive

nuclear weapons components or materials to third world countries seeking to obtain nuclear weapons. This problem is manifested in the recent announcement by Tajikistan that it may seize a secret plant on its territory and try to set up a uranium development consortium with Arab countries.²⁷ With the hundreds of 'displaced' scientists that are now out of work in the former Soviet Union and the likely problems that will be evidenced in trying to secure borders and enforce export laws, this transfer of technology is a major problem for the world. These situations logically lend to the problem of proliferation and the inherent dangers posed by this major national security issue.

PROLIFERATION OF WEAPONS OF MASS DESTRUCTION

The Gulf War helped bring into frightening focus the problem of the spread of weapons of mass destruction beyond the traditional superpower arena. For more than two decades, the Treaty on Nonproliferation of Nuclear Weapons (NPT) has been the primary legal barrier to the proliferation of nuclear weapons. In force since 1970, the NPT has been followed by some 140 nations. The states that are non-nuclear and party to the Treaty have agreed not to manufacture nuclear weapons and to accept 'full-scope safeguards.' These safeguards make all of the participating nations' peaceful nuclear activities subject to inspection by the International Atomic Energy Agency to assure that their nuclear material is not diverted into nuclear weapons programs. In recent years at least two heavily militarized totalitarian states ruled by dictatorships sought to violate the NPT even though they were parties to the accord. These nations,

Iraq and North Korea, are significant examples of the problems related to proliferation.²⁸ The problem, however, is not confined to these relatively large and troublesome countries but is instead reaching global proportions through the Third World.

The proliferation of nuclear weapons and ballistic missile technology into Third World nations is now a major national security concern of the U.S., and the control of these weapons and technology is a fundamental objective of our National Security Strategy. Several nations now demonstrate the technological capability and the political will to develop nuclear weapons and delivery capability. In the near term, these developments are not a significant threat to the U.S. homeland, but there is a threat to our forward-deployed forces and those of our allies. By the end of this century, tactical ballistic missiles and nuclear weapons capability are likely in a significant number of countries. The risk of a Third World country using these weapons against U.S. forces could be significant.²⁹ Israel, India, and South Africa are now thought to be nuclear weapons nations. In 1990 the President was unwilling to certify to the Congress that Pakistan did not possess a nuclear weapon. Argentina, North Korea, and Brazil have domestic nuclear power programs and are capable of producing weapons-grade uranium or possibly, in the case of North Korea, plutonium.³⁰

In the near future, one of the greatest potential threats facing the militaries of the U.S. and its allies will certainly come from hostile Third World nations armed with ballistic

missiles and possibly nuclear weapons or other weapons of mass destruction. The proliferation of Third World ballistic missiles is a problem of global dimensions. At least 21 developing nations are trying to acquire a ballistic missile capability. These nations are concentrated in the Middle East, South and East Asia, Southwest Asia, and Latin America. Many of these same nations have the added potential to develop chemical as well as nuclear weapons. While the ranges of these nations' missiles vary from a few score to approximately two thousand kilometers, and the weight of the payloads they can carry and accuracies also differ, still, they make regional conflicts substantially more unpredictable. The trend toward acquiring and producing larger and more powerful rockets capable of carrying large warheads to targets a thousand or more miles away is a particular concern. Significantly, many of the nations engaged in this work - Algeria, Argentina, Brazil, China, Cuba, India, Israel, and Pakistan - have not signed or ratified the NPT raising the possibility that some of these nations are also interested in developing nuclear weapons for use with missile delivery systems.³¹ This problem is even more acute given the potential for at least 15 developing nations to become capable of producing their own ballistic missiles in the next decade. More alarming is the potential for at least six countries to have missiles with ranges of at least 1500 miles -- several times the range of the infamous Iraqi SCUDS.³²

An additional consideration that must be weighed in any analysis of the continuing deterrent role of our nuclear forces

is that of the proliferation of chemical and biological weapons. "Ten nations have confirmed stockpiles of chemical weapons, including Vietnam, North Korea, Taiwan, Libya, Syria, Iran, and Iraq. Six others, including China, Israel, and Ethiopia, are believed to be pursuing chemical programs. In addition, there may be as many as ten nations working to produce biological weapons."³³ While it is argued by some that the deterrent umbrella of nuclear weapons does not extend to the potential use of these weapons against U.S. forces or allies, it must also be noted that these weapons have never been used against U.S. forces since the advent of the Cold War and contemporary Nuclear Strategy. The uncertainty of a potential U.S. response can only serve to extend deterrence against these weapons. As regional threats and proliferation of weapons of mass destruction become more defined, these issues will become clearer and must be addressed in our emerging U.S. National Strategy.

EMERGING U.S. MILITARY STRATEGY

With the end of the Cold War and the other major political, economic, and military factors influencing a "New" World Order, it is apparent that the U.S. must reshape its National Security Strategy and supporting Military Strategy to meet an evolving threat. There must be a shift away from a bipolar view of the world and recognition of a more fragmented, unpredictable, and fragile multipolar system. There will be new international and regional actors, issues, and threats that must be addressed as the U.S. develops relevant strategy, procedures, and institutions to deal with a wider range of threats.

The old international order and its inherent focal point for Free World policies is gone, and the focal point is now blurred by the whirlwind of historic changes of the last two years. The decline of the Soviet threat has fundamentally changed the concept of threat analysis as a basis for force structure planning. The threat now faced by the U.S. is the threat of the unknown or the uncertain. This threat is manifested through regional instability. The challenge is to be prepared to handle a crisis or war that no one has predicted or expected. While the end of the Cold War has signalled a dramatic improvement in the prospects for peace, security, and economic progress, the U.S. still faces a very troubled world with danger, uncertainty, and instability in many regions. In the foreseeable future, the U.S. and its Allies, often in concert with the United Nations, will be called upon to deter regional aggressors.³⁴

The Nuclear Strategy and Strategic Nuclear Forces required to support that strategy are perhaps the most complex and controversial issues facing the leadership of the U.S. as the New Military Strategy is developed. Numerous advisory panels, study groups, and so-called independent 'experts' are now in the process of addressing these emerging roles and requirements. What is clear from these analyses is that two distinct schools of thought exist when discussing a post-containment nuclear strategy. The first approach is to use the Kremlin's retreat to renounce nuclear weapons and to rebuild U.S. security on the basis of global cooperation, diplomacy, and, for the military role, non-nuclear, high technology weapons. Adherents of this

approach argue for a minimal nuclear deterrent as a way station to abolition, for limiting the nature and number of targets, and for progressively restricting the circumstances in which the U.S. would modernize, test, and threaten to use an ever-diminishing nuclear stockpile. The more conventional approach holds that nuclear weapons exist and cannot be willed away or uninvented and that the need is to find the right role for these weapons in terms of their deterrent value in the post-Cold War environment. This approach embraces an old purpose of nuclear and global preeminence but adds a new strategy of preparing for numerous nuclear and other uncertain threats arising from Soviet successor states, a range of Third World countries, and elsewhere.³⁸

The National Security Strategy and supporting National Military Strategy are aligned with the latter, more conventional strategy and reflect a realistic approach to force planning. This logically leads to the questions of the role of nuclear weapons in the outyears and the number of weapons required to support that role. Our National Security Strategy lists ensuring strategic nuclear deterrence as one of the four fundamental demands of a new era. Indeed, deterring nuclear attack remains the number one defense priority of the U.S. Further, the National Security Strategy states that adjustments to our nuclear forces and policies that guide them will be made. These adjustments will be based upon the thought that our new strategy must encompass potential instabilities within states as well as the potential threat from states or leaders who may perceive that they have little to lose in employing weapons of mass

destruction.³⁶ The recently published National Military Strategy recognizes the uncertainty cited above and the beginning of a new era. This new era will demand responses and plans which can be readily adapted to the unforeseen and unexpected. The U.S. is now in the process of developing adaptive operational plans which encompass continuity of planning from peace through the use of nuclear forces. The National Military Strategy defines the basic role of nuclear forces in the new era as deterring the use of weapons of mass destruction and to serve as a hedge against the emergence of an overwhelming conventional threat.³⁷

It is obvious that the long held roles and missions of our nuclear forces are changing. It is equally obvious that the basic deterrent role remains and will be present into the foreseeable future. The number of weapons required to support this continuing requirement is the arguable point and remains uncertain. It is reasonable to assume that the number will be somewhere between the 2,500 warheads proposed by Boris Yeltsin and the 6,000 warheads currently agreed to in START. Whatever the final number, the important point is that this smaller stockpile remains modern and restructured to maintain a credible deterrent as part of a new military strategy and supporting operational plans.³⁸ The constant in this evolving security environment is that nuclear weapons will remain a crucial part of the U.S. National Security and National Military strategies. The role of these weapons is clearly deterrence which results in the debate as to what exactly are the deterrent requirements for our Strategic Nuclear Forces in the new world order?

DETERRENT REQUIREMENTS

The deterrent requirements for our nuclear forces are complex and evolving. The historical focus of our Strategic Nuclear Forces, the threat posed by the massive arsenal of the Soviet Union, is now perceived by many to be reduced or even non-existent. The regional threats faced by U.S. planners are not easily defined or recognizable. The proliferation of nuclear weapons and ballistic missile technology is only now becoming viewed as a threat to our national security. Many perceive that nuclear weapons do not deter the use of other weapons of mass destruction such as chemical and biological weapons. Finally, based upon their success in the Gulf War, many advocate high technology, "smart" munitions as the emerging cornerstone of a "new" deterrence policy. As discussed earlier, our National Security Strategy, National Military Strategy, and the strategies of our NATO allies all support the continuing deterrent requirement of our nuclear forces. What is not clearly defined are the specific threats that are to be deterred. This is the root problem facing the leadership of the U.S. as it attempts to protect the viability of our Strategic Nuclear Forces from Congressional and public outcries for deep budget cuts and further unilateral reductions. The threats as well as the supporting strategies to counter those threats must be clearly articulated and supported. What then are the deterrent requirements and the threats upon which they are based?

Deterrence of strategic nuclear attack upon the U.S. and its allies remains the basic and continuing requirement of our

Strategic Nuclear Forces. Any discussion of this basic deterrent requirement is centered upon the problems posed by the dissolution of the Soviet Union and its residual nuclear forces. While the START Treaty, unilateral reduction declarations by the Soviet leaders, and other arms initiatives are encouraging, the problems of Soviet nuclear arms will remain well into the 21st Century. The breakup of the Soviet Union raises legitimate concerns about security and control over Moscow's strategic nuclear weapons. The potential loss of central control over this strategic arsenal is, perhaps, the gravest problem facing the U.S.³² As previously discussed, the nuclear arsenal of the former Soviet Union consists of over 30,000 warheads spread throughout the breakaway Republics. It will take at least a decade to eliminate these weapons as agreed to in START, assuming that elimination agreements are adhered to and elimination facilities to support the agreements are ever achieved. Current estimates state that it will take until the year 2000 just to dismantle down to the 9,000 warhead level.⁴³ The time required to regain control of this vast arsenal by central authorities is unknown and assumes that the breakaway Republics give up control of weapons on their sovereign territories. Loss of control of these weapons leads to many scenarios that could threaten the security of the U.S. and its allies. These scenarios include the following:

- Inadvertent or accidental launch against the U.S. or its allies by a disillusioned or subversive element.
- Nuclear blackmail of the West by any of a number of Republics

retaining nuclear weapons and facing grave internal difficulties.

- Nuclear civil war within the Former Soviet Union that threatens Western Europe as well as other parts of the world.
- Terrorist acts that secure nuclear weapons within a nuclear Republic and threaten the U.S. and its allies.
- Transfer of nuclear weapons to Third World countries or groups.

These are only a few of the potential threats posed by the fragmentation of the Soviet Union. Equally troubling to the U.S. is the Russian desire to continue modernization of its residual nuclear forces as well as its insistence that it be allowed to continue pursuing military nuclear research even as Western aid is being given to the country for peaceful assistance.⁴¹ As indicated, the emerging strategies of the U.S. and NATO take into account this threat and support the continuing deterrent requirement for the nuclear weapons of the U.S. Indeed, the U.S. Strategic Nuclear Forces must be retained as long as nuclear weapons remain in global arms inventories. Especially to the extent that Western Europe may become progressively denuded of nuclear arms, the burden of deterrence will shift more squarely onto the U.S.⁴²

The deterrent requirements of nuclear weapons as related to the various regions of the world are far more complex and contentious than the problems of the former Soviet Union. These requirements are directly related to the problem of proliferation and the U.S. national defense strategy of forward presence, as

well as the concept of peacetime engagement. The growing complexity of the international security environment makes it increasingly difficult to predict the circumstances under which U.S. military power might be employed. Hence, forward presence is fundamental to a regionally oriented strategy. In peacetime, forward presence is the "glue" that holds alliances together, builds cooperative institutions, reduces regional tensions, deters potential aggressors, and demonstrates U.S. resolve. These forward deployed forces contribute to regional deterrence in Europe, Asia, Central and South America, and at sea.⁴³ The problem that arises from this forward presence is that U.S. forces and those of our allies will be increasingly under the threat of weapons of mass destruction on a regional basis. Any discussion of these regional deterrent requirements begins with nuclear weapons but must include chemical and biological weapons as well.

As stated, at least 21 developing nations are in the process of acquiring ballistic missiles. Of these nations, fifteen will be capable of producing ballistic missiles in the next decade, and eight of these countries have not signed or ratified the NPT. Coupled with this problem is the previously cited proliferation of nuclear weapons technology into numerous Third World countries. This proliferation leads to the conclusion cited in the Joint Military Net Assessment that by the end of this century, a significant number of countries will possess both tactical ballistic missile and nuclear weapons capability. Consequently, the risk of one of these countries using these

weapons against forward deployed U.S. forces is significant. Thus, maintaining the deterrent value and credibility of our nuclear forces remains an essential part of the U.S. military capability.^{**} While many question the validity of the deterrent role of our Strategic Nuclear Force in regional confrontations outside the NATO context, it is inappropriate to reject this role out of hand. Recent testimony before the Senate Armed Services Committee began to examine this deterrent requirement. "The chance that the U.S. would ever use nuclear weapons in a regional conflict is remote. But a policy of last resort is appropriate here as in Europe. Nuclear weapons may be a last resort when other means are inadequate to deal with the catastrophic threats at hand, such as an impending nuclear, massive chemical, or biological attack on the urban populations of an ally."^{**} The deterrent requirement based upon a regional approach is best demonstrated by the forward deployment of our short-range nuclear capable systems into hostile regions where forward deployed U.S. forces are under threat by a nuclear capable adversary. This deployment, coupled with a flexible response strategy and the continued lack of a U.S. renouncement of first use, creates uncertainty in the mind of any aggressor. This scenario results in a broad global deterrent requirement in response to the proliferation of nuclear capability among Third World nations.^{**} This is certainly a requirement that will carry well into the next century and will likely expand as more and more nations seek a nuclear weapons capability.

While the proliferation of nuclear weapons and ballistic

missile capability is alarming, the proliferation of other weapons of mass destruction is equally disturbing. Ten nations have confirmed stockpiles of chemical weapons, including Vietnam, North Korea, Taiwan, Libya, Syria, Iran, and Iraq. Six others, including China, Israel, and Ethiopia, are believed to be pursuing chemical programs. In addition, there may be as many as ten nations working to produce biological weapons.⁴⁷ The threat posed by these weapons to forward deployed U.S. forces is considerable as was demonstrated in the Gulf War. While the deterrent effect of nuclear weapons against the use of chemical and biological agents can be questioned, it is clear that these weapons have not been used against U.S. forces or allies in recent warfare. This situation has been the case even through the Gulf War where such weapons were present in large quantities, and their historical use was inextricably tied to an aggressor. Why Saddam Hussein opted not to use his chemical and biological stockpiles is not yet clear. It can be argued that the threat of nuclear retaliation on the part of either Israel or the U.S. led coalition dissuaded the Iraqi use. This situation signalled the existence of a 'mixed deterrent' - one antagonist possessing chemical weapons 'balanced' by the enemy's nuclear arsenal. As the war seemed to indicate, the operation of a mixed deterrent between nuclear and chemical weapons is feasible.⁴⁸ Israeli discussions of deterrence during the Gulf War tend to focus on the question of why Saddam Hussein was willing to launch SCUDs against Israeli cities, but did not use chemical warheads. The tentative conclusion frequently drawn is that the Israeli nuclear

threat was the key to the Iraqi unwillingness to escalate to the use of chemical warheads. It is not at all clear that the threat of conventional retaliation could have provided an adequate deterrent capability.⁴⁸ In any case, nuclear weapons can only serve to enhance deterrence of the use of chemical and biological weapons against U.S. forces or allies. This deterrent capability is even more critical in the outyears as the U.S. and its allies eliminate their chemical stockpiles. The elimination of chemical stockpiles places the deterrence requirement for chemical and biological weapons directly on either our Strategic Nuclear Forces or a conventional option. The option of a nuclear deterrent to the use of chemical and biological weapons will certainly remain an ambiguous and arguable issue that perhaps enhances deterrence through its ambiguity - a potential adversary must weigh the entire spectrum of U.S. options before use of such weapons. In any case, the requirement for deterring the use of chemical and biological weapons is clear and will remain well into the future. Nuclear weapons can only serve to enhance this deterrent requirement.

Finally, any discussion of deterrent requirements must take into account destabilizing potential scenarios involving new nuclear weapons states in Europe and the Far East. One dimension of a new European order is certain - Germany, France, Great Britain, and perhaps Italy will assume major power status. The distribution of power and the distribution of nuclear weapons among these states are equally unclear. Indeed, who gets nuclear weapons is likely to be the most problematic question facing the

new Europe.⁵⁰ This dimension of the security environment is related to a growing industrial base and an inherent growth in national power. This problematic issue will almost certainly be the case for Japan, South Korea, and China in the Far East. In the case of Germany and Japan, it is in the U.S. interest to nurture a security environment in which they are responsible global leaders, maintain responsible defense efforts, tend to align themselves with the U.S. and other democracies on the most fundamental security issues, and do not feel compelled to acquire independent nuclear arsenals in order to play their part as leading world powers. The U.S. nuclear posture has a significant role or requirement to play in this process. If the U.S. ceased to maintain a viable nuclear force and supporting doctrine, and if other acknowledged or covert nuclear powers -Britain, France, China, perhaps Israel, India, Pakistan, and others - also had dozens or hundreds of nuclear weapons, it is not difficult to envision a distant future in which the political processes in the emerging world powers would argue, 'If them, why not us?' One countervailing force against that destabilizing possibility is the maintenance of a U.S. strategic relationship with these powerful and non-nuclear states. Extended deterrence, a nuclear umbrella for key friends and allies, is an important role for U.S. nuclear weapons in the new world order.⁵¹

This brief analysis of the traditional and emerging deterrence requirements for our Strategic Nuclear Forces indicates that the security environment facing the U.S. is changing, but the base requirements for our nuclear forces

remain. These requirements can be seen in two contexts, deterrent related and politically related. In the past, according to both policy and practice, nuclear weapons were expected to affect a potential adversary's decision making with regard to the use of nuclear weapons and other options that might escalate to the use of nuclear weapons. Past U.S. policy was not guided by the assumption that nuclear weapons deter only the use of other nuclear weapons. The future deterrent requirements of our Strategic Nuclear Forces should not be so limited. Thus, the future deterrent requirements of our Strategic Nuclear Forces can be summarized as follows:

- To deter the conventional, nuclear, chemical, and biological attack of the U.S. homeland, deployed forces, and allies.
- To deter the escalation of conventional conflicts to the use of nuclear, chemical, and biological weapons.
- To deter the escalation of crises to armed conflict.
- To deter provocative challenges to U.S. interests.⁵²

The political role or requirement of our Strategic Nuclear Forces is seen as a symbol of U.S. power and influence. The concept of extended deterrence was a significant doctrine of U.S. policy for many years and is even more important as proliferation is realized throughout every region of the world. Extended deterrence becomes even more critical as U.S. forces are downsized, forward deployments are reduced, and short-range nuclear weapons are returned to the U.S. and demilitarized.

Thus, nuclear weapons will, for the foreseeable future, remain a key element in a policy of deterrence. Deterrence will

assume even greater importance in a multipolar international order characterized by the spread of nuclear, biological, and chemical weapons. The major problem now facing the leadership of the U.S. is the development of a Nuclear Strategy to fit these deterrent requirements in an evolving and volatile world viewed as devoid of the historical Cold War threat upon which our nuclear forces and nuclear policy were based.

CONCLUSIONS

What is clear from this brief analysis is that the historical Cold War nuclear strategy and force posture are changing. These changes are brought about by significant alterations in the political and military structures across Europe, arms control agreements and initiatives, and most significantly by the collapse of the Soviet Union. These changes result in a marked alteration in U.S. and allied nuclear requirements that encompass both nuclear strategy and the weapons systems required to meet that strategy. This does not, however, signal the end of the requirement for nuclear deterrence and the basic U.S. and allied strategies pertaining to the Strategic Nuclear Forces of the U.S. The U.S. Nuclear Deterrence Strategy remains valid, and the deterrence of attack on U.S. territories, deployed forces, and allies remain basic objectives. The Flexible Response Strategy of the U.S. remains viable and continues to require the escalatory options provided by our Strategic Nuclear Forces. The concepts of burden sharing and shared nuclear risk remain valid in the NATO context and are acknowledged as such by the Alliance. On a regional basis,

extended deterrence provided to our allies by our nuclear forces is even more critical as the proliferation of weapons of mass destruction continues at an alarming rate and conventional forces and forward deployments are reduced. The Strategic Nuclear Forces of the U.S. provide deterrence to these regional areas through forward deployment of dual-capable nuclear systems, demonstration of national resolve and commitment, and the uncertainty of the potential U.S. response to any adversary. U.S. arms control agreements and initiatives must be viewed as a logical shifting in national strategy based upon changing military and political conditions and not the end of the deterrent role of our nuclear forces. Certainly, changes or shifts in our nuclear strategy and force posture are in order, but the fact that nuclear weapons were inexorably linked to a successful deterrent strategy that effectively transcended the Cold War must not be forgotten.

In light of these and other significant changes that result in the 'New' World Order, the U.S. developed a new National Security Strategy and a supporting National Military Strategy. The nuclear forces of the U.S. were adjusted in size, composition, force posture, and command and control structure. Modernization plans were adjusted and deployments constrained to match an evolving threat. What is essential at this point is to develop and articulate a new Nuclear Strategy that meets the requirements of deterrence in this 'New' World Order. This development and articulation are necessary to ensure the maintenance of a viable deterrent force in a fiscally constrained environment that is

seen by some as relatively free of threats requiring significant U.S. nuclear forces. In short, a Nuclear Strategy that matches our new National Security and National Military strategies is needed. Without the timely development of such a strategy, the future of our Strategic Nuclear Forces is likely to be decided by a Congress that is influenced by public demands for military reductions and the elusive 'peace dividend.' This situation may result in U.S. nuclear forces losing the two key characteristics that have marked their successful contributions of the past, capability and credibility.

With the timely development of a new Nuclear Strategy in mind, several recommendations should be considered. The first is that the emerging U.S. Nuclear Strategy must be promptly developed and articulately presented to the Congress, the public, and our allies. This first recommendation is required for several reasons. The ultimate force structure of our Strategic Nuclear Forces cannot be determined until a strategy for their deployment is developed. Until that point, the focus of the entire policy community and press will be to reduce forces even more without consideration of the threat, modernization requirements, or stability of the force.

This New Nuclear Strategy should be accompanied by the formal U.S. statement of our base force nuclear requirements. This number will certainly be contentious and open to debate, but its determination will help focus on developing operational plans, modernization plans, force structure decisions, and, most importantly, our New Nuclear Strategy. As previously stated, it

appears that the number will be somewhere between 2,500 and 6,000 weapons. Recent testimony before the Congress recommended various levels, but perhaps the most logical was presented by Paul H. Nitze who stated, "Our Strategic Forces should remain at least equal in size and effectiveness to the former Soviet strategic arsenal. We should also retain a strategic reserve that would be as large as the strategic arsenals of all other nations."³³ These formal statements of strategy and force levels serve several purposes, with the most important being political. Responsible stewardship of the U.S. nuclear arsenal sets an example for others. An orderly, reasonable adjustment of nuclear forces should be accompanied by compelling rationales and postures for forces retained. That will inspire confidence in American leadership, and that is the current challenge.³⁴

As part of a New Nuclear Strategy, several basic concepts must be reemphasized and restated. The policy of Flexible Response should be retained and restated outside the NATO context to include the escalatory option for use of nuclear weapons against chemical and biological strikes on U.S. interests. Accordingly, the option of first-use of nuclear weapons must be retained. While first-use may be politically untenable and unappealing, it is obviously a significant contribution to deterrence of weapons of mass destruction. This contribution was likely demonstrated during the Gulf War and will become increasingly important as proliferation expands the number of potential aggressors with weapons of mass destruction and U.S. strategy focuses increasingly on regional conflict. While this

point may be debatable to some, it is not clear at all that the threat of conventional retaliation will provide an adequate deterrent to an aggressor such as Iraq.⁵⁸ "It is not difficult to entertain nightmarish visions in which a future Saddam Hussein threatens American forces abroad, U.S. allies or friends, and perhaps even the United States itself with nuclear, biological, or chemical weapons. If that were to happen, U.S. nuclear weapons may well be a resource for deterring execution of the threat."⁵⁹

The end of the primacy of the East-West nuclear confrontation as the preeminent factor in our Military Strategy increases the importance of current and emerging regional threats in our evolving national strategies. This multipolar international security environment does not signal the end of the deterrent requirement for our Strategic Nuclear Forces but, rather, a requirement for redefinition of the strategy that governs those forces. The constant in this evolving security environment is that nuclear weapons will remain a crucial part of the U.S. Military Strategy and force posture. While a New Nuclear Strategy is not the panacea for all the problems of a New World Order, it will serve to enforce the credibility of our Strategic Nuclear Forces as well as communicate to any potential adversary the national will behind this force. This strategy will, in turn, allow military planners to focus on the third requirement of an effective deterrent force, the capability of a viable military threat. The problems of proliferation of weapons of mass destruction and the ultimate disposition of the Soviet

stockpile must still be addressed, but the maintenance of our deterrent force is the preeminent concern and must be ensured at this point. The first step in the process is to develop and implement a New Nuclear Strategy and the force posture required to support it. The Nuclear Era is maturing, and it cannot be willed or wished away. As long as any potential adversary of the U.S. possesses nuclear weapons, there will be a deterrent requirement for our Strategic Nuclear Forces. "Regardless of the formal reshaping of Western strategy and defense preparation away from its erstwhile nuclear dependence, residual nuclear dread should help deterrence even in a less markedly nuclear era."⁵⁷

ENDNOTES

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